

Abstracts

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end of 2007 and linked with the National mortality database. Kaplan–Meier method was used to yield the estimated survival function of both groups. Constant excess hazard model was used to project the long-term survival of these patients by utilizing linear extrapolation. Life expectancy was estimated while EYLL was calculated by subtracting the life expectancy of patients from those of their age- and gender-matched referents. HD patients were then matched with PD patients on age, gender, and diabetic status. Life expectancy, EYLL and survival for the two groups were re-compared. Cox Model was applied to determine the risks for mortality. **RESULTS:** A total of 305 HD and 428 PD patients were included. Before matching, HD patients were older than PD patients (62.4 ± 13.7 versus 53.1 ± 16.7 years, $p < 0.0001$), and more HD patients had diabetes mellitus (DM) (HD versus PD, 29.2% versus 20.6%, $p = 0.0072$). Life expectancy and EYLL of HD patients were 8.8 and 11.5 years, compared with those of PD patients (19.9 and 7.4 years). After matching, 236 pairs of HD and PD patients were selected. Life expectancy ($p = 0.790$) and EYLL ($p = 0.793$) of both groups were similar on re-analysis. Age (adjusted hazard ratio, AHR 1.07, 95% CI 1.05–1.09) and DM (AHR 3.81, 95% CI 2.28–6.36) were independent predictors of mortality. For diabetic patients, survival was better if the patients were treated with HD (AHR 0.24, 95% CI 0.11–0.53). **CONCLUSIONS:** After matching, life expectancy and EYLL between HD and PD patients were similar, but survival was better for diabetic patients if they were treated with HD.

PUK6

ASSESSMENT OF CARDIOVASCULAR (CV) COMORBIDITY IN PATIENTS WITH OVERACTIVE BLADDER (OAB) DISORDER IN A REAL-WORLD SETTING

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OBJECTIVES: To determine the proportion of OAB patients potentially at risk for adverse events by assessing CV co-morbidity as measured during the six months prior to OAB diagnosis/treatment by biologic measures, CV diagnoses, and CV concomitant drug use among treated and untreated OAB patients. **METHODS:** The GE Centricity EMR database was utilized to identify patients with a diagnosis of OAB using ICD-9 codes or a prescription between January 1, 1996 to March 30, 2007 for an OAB antimuscarinic agent. The treated OAB patients with 13 months of continuous eligibility pre- and post-index date formed the OAB cohort. Based on the presence of ≥ 1 pharmacy claim for an OAB antimuscarinic agent, the OAB cohort was stratified as treated or untreated. A random sample of age and gender matched patients formed a comprehensive non-OAB control cohort; they had no diagnosis of OAB, urinary bladder dysfunction, or pharmacy claim for an OAB antimuscarinic agent. **RESULTS:** OAB patients (N: 41,440; 83.6% women; median age 65 years), when compared to non-OAB patients (N: 77,272; 83.2% women; median age 64 years), were more likely to have CV comorbidities (57.6% vs. 44.6%; $p < 0.001$), a high heart rate (≥ 80 beats / minute) (31.4% vs. 19.9%; $p < 0.001$), higher Framingham risk (9.9% vs. 9.6%; $p < 0.005$) as well as use of CV medications (57.1% vs. 38.8%; $p < 0.001$). In treated vs. untreated OAB patients, CV comorbidities (58.8% vs. 53.7%; $p < 0.001$), proportion with a high heart rate (32.3% vs. 27.6%; $p < 0.001$) and Framingham risk (10.2% vs. 8.6%; $p < 0.001$) and use of CV medications (60.7% vs. 42.4%; $p < 0.001$) also differed. **CONCLUSIONS:** CV comorbidities were more prevalent in OAB patients than in patients without OAB. Among the OAB patients, CV co-morbidity and prior exposure to CV medications was more prevalent in those who received antimuscarinic treatment than in patient who did not receive treatment.

URINARY/KIDNEY DISORDERS – Cost Studies

PUK7

HOSPITAL DISCHARGE COST AND LENGTH OF STAY OF PERITONEAL DIALYSIS AND HEMODIALYSIS

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OBJECTIVES: This study evaluates the difference in total hospital charges and length of stay (LOS) between peritoneal dialysis (PD) and hemodialysis (HD) patients. **METHODS:** Hospital inpatient data was analyzed from the Healthcare Cost and Utilization Project's 2006 National Inpatient Sample. Patients were identified as HD or PD by a procedure code of 39.95 or 54.98, respectively, and a diagnosis code for end-stage renal disease (585.6). Exclusion criteria include having a procedure code for both PD and HD, a diagnosis code for acute renal failure (584.x), or under age 18. Differences in LOS and total charges were analyzed using univariate and multivariate analysis adjusted for age, gender, and comorbidities. Subgroup analyses were done by payer type. **RESULTS:** 530,409 HD and 22,031 PD discharges met inclusion and exclusion criteria. PD patients were younger, more female, and had less comorbidity. The mean total charge for a PD discharge was \$35,846 compared to \$41,336 for HD ($p < 0.0001$). The mean LOS was 6.57 days for PD and 7.25 days for HD ($p < 0.0001$). After adjusting for covariates, HD total charges were 13.9% higher than PD ($p < 0.0001$) and LOS was 6.7% longer ($p = 0.0086$). For Medicare patients, total charges were 10.0% higher in HD patients ($p < 0.0001$) and LOS was not different between HD and PD. For patients with private insurance, mean total charges were 21.7% higher in HD patients ($p < 0.0001$) and LOS was 9.2% greater ($p < 0.01$). The charge difference, HD minus PD, between private and Medicare patients was significantly

higher in the former. **CONCLUSIONS:** Adjusted mean total charges and LOS were significantly higher in patients receiving HD compared to PD. LOS was significantly longer in privately insured HD patients but not in Medicare HD patients. The charge difference between HD and PD was significantly higher in privately insured compared to Medicare patients.

PUK8

THE COST-EFFECTIVENESS OF PARICALCITOL VERSUS STANDARD TREATMENT FOR SECONDARY HYPERPARATHYROIDISM – MULTI-COUNTRY PERSPECTIVES

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OBJECTIVES: The objective of this study was to determine the cost effectiveness of paricalcitol versus standard treatment in patients with chronic kidney disease (CKD) in the health care setting in Italy, Portugal and Turkey in 2008. **METHODS:** A Markov process model was developed employing data sources from the published literature, paricalcitol clinical trials, official country price/tariff lists and national population statistics. The comparator was the standard treatment for each country; Italy, Portugal, and Turkey. The primary perspective of the study was that of the society. The primary efficacy outcome in the Paricalcitol (reduction SHPT, reduction proteinuria, complications and mortality) were extrapolated to effectiveness outcomes: number of life years gained (LYG) and number of quality-adjusted life-years (QALYs). Clinical and economic outcomes were discounted at 3.0%. **RESULTS:** The base case analysis is based on a 10-years time horizon and a comparison of paricalcitol in stage CKD 3, CKD 4 and CKD 5 versus standard treatment. The use of paricalcitol leads to an additional medical cost of €4335 to €6564; and an increase in life years gained of 0.48 to 0.67 years, and a gain in QALYs of 0.42 to 0.64. Consequently the use of paricalcitol results in an ICER of less than €11,000/QALY from the perspective of the society in all three countries. This value is well below the willingness to pay threshold. **CONCLUSIONS:** The results showed that the favorable clinical benefit of paricalcitol results in positive short and long-term health economic benefits. This study suggests that the use of paricalcitol in patients with early chronic kidney disease may be cost-effective from a society perspective in Italy, Portugal and Turkey.

PUK9

COST-EFFECTIVENESS ANALYSIS OF ALPHA-BLOCKER AND ANTIMUSCARINIC COMBINATION TREATMENT IN MEN WITH LOWER URINARY TRACT SYMPTOMS RELATED TO BENIGN PROSTATIC HYPERPLASIA AND OVERACTIVE BLADDER: APPLICATION TO THE UNITED KINGDOM

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OBJECTIVES: A 12 week clinical trial (TIMES) demonstrated that therapy with tolterodine extended release (TOL) + tamsulosin (TAM) provides clinical benefits versus TOL or TAM monotherapy or placebo (PBO) in men with lower urinary tract symptoms (LUTS) including overactive bladder (OAB). The present analysis estimated the costs and quality adjusted life years (QALYs) associated with these therapies from the perspective of the UK health care system. **METHODS:** TIMES cohorts receiving TOL, TAM, TOL+TAM, or PBO were followed from therapy initiation to 12 weeks. A decision tree model was used to extrapolate the 12-week results to 1 year (including need for surgery owing to treatment failure at 12 weeks), and to track patients' outcomes (symptoms, utility, and costs). Because TIMES did not include costs and QALYs, data from the EpiLUTS epidemiologic survey (9416 males) were used to model a mathematical relationship between LUTS (daytime and nocturnal frequency, urgency episodes, urgency urinary incontinence episodes, and International Prostate Symptom Scores [IPSS]), quality of life, and utility. This was used to convert improvements in TIMES patients' LUTS into utility scores and QALYs. The model included drug and surgery procedure costs and hospital length of stay. **RESULTS:** Incremental QALYs of TOL+TAM vs PBO, TAM and TOL were 0.033, 0.016 and 0.011, and corresponding incremental costs were ≤ 262 , ≤ 253 and ≤ 30 , respectively, resulting in cost-utility ratios for TOL+TAM of $\leq 7,894$ /QALY gained compared with PBO, and $\leq 15,346$ /QALY gained compared with TAM. TOL+TAM combination therapy was both more effective and cost-saving compared with TOL. Univariate sensitivity analyses showed that patient utility was most responsive to changes in IPSS score and number of urgency episodes. Changing the percentage of patients undergoing surgery did not substantially affect model outcomes. **CONCLUSIONS:** The TOL+TAM combination therapy appears to be cost-effective compared with TOL or TAM monotherapy or PBO in male patients with LUTS.

PUK10

LONG-TERM COST EFFECTIVENESS OF SIROLIMUS REGIMEN COMPARED WITH CALCINEURIN INHIBITOR REGIMENS FOR IMMUNOSUPPRESSION AFTER RENAL TRANSPLANTATION IN KOREA

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OBJECTIVES: The calcineurin inhibitor (CNI) regimens, including tacrolimus or cyclosporine, have improved the overall success of renal transplantation through increased short-term patient and graft survival. However, this has not translated into